Fairfield Ludlowe High School - Fairfield Warde High School

BIOLOGY 21

Insert Teacher Name | Insert Room Number

Full Year | Insert Period

Insert Email Address

COURSE DESCRIPTION

This course will provide students with a comprehensive knowledge of biology and will prepare students for entry into the Advanced Placement program. The course uses a molecular biology approach. Topics will be illustrated through the following themes that will recur throughout the course: evolution; structure and function; energy relationships; reproduction and inheritance; unity and diversity; and stability and patterns of change. Students in this course are capable of handling primary source material for reference and are highly motivated, self-directed learners. This course requires excellent study skills including note taking, time management and organization.

COURSE OBJECTIVES

Students will understand that:

- due to its unique chemical structure, carbon forms many organic and inorganic compounds.
- fundamental life processes depend on the physical structure and the chemical activities of the cell.
- similarities in the chemical and structural properties of DNA in all living organisms allow the transfer of genes from one organism to another.
- in sexually reproducing organisms, each offspring contains a mix of characteristics inherited from both parents.
- evolution and biodiversity are the result of genetic changes that occur over time in constantly changing environments.
- microorganisms have an essential role in life processes and cycles on Earth.
- living organisms have the capability of producing populations of unlimited size, but the environment can support only a limited number of individuals from each species.
- the use of resources by human populations may affect the quality of the environment.

UNITS OF STUDY

- Introduction
- Biochemistry
- Cell Structure and Function
- Cell Energetics
- Nucleic Acids and Molecular Genetics
- Cell Cycle and Meiosis
- Classical and Applied Genetics
- Classification
- Evolution and Population Genetics
- Microbiology
- Animal Evolution
- Plant Evolution
- Ecology

COURSE POLICIES AND REQUIREMENTS

GRADING

Summative Assessments:	90% Insert Categories/Weighting (ie. Papers – 30%)
Formative Assessments:	10% Insert Categories/Weighting (ie. Quizzes – 50%)
Behavioral Characteristics:	0% Insert Categories/Weighting (ie. Particip. - 90%)

Insert Additional Grading Information Here

MATERIALS

Insert Course Materials Here (ie. Textbook, Binder, Calculator, Highlighters)

EXPECTATIONS OF STUDENTS

Insert Course Expectations Here

EXTRA HELP

Insert Course Expectations Here

Insert Additional Information Here